had been recorded. Whole gale and storm winds occurred on the opposite coast of Cuba near Nipe Bay (due north of Santiago), and also eastward from Santiago as far as Guantanamo Bay where there was minor storm damage.

The hurricane center was undoubtedly deflected and much weakened in intensity by the Sierra Maestra Mountains, which front the coast westward from Santiago. During October 22 and 23 the disturbance moved westward and then southwestward, and it started back again across the western Carribbean Sea, to increase in intensity and resume full hurricane force before entering Honduras near Cape Gracias, on October 25.

The only ship to report a close contact with the storm during its southwestward movement over the open sea was the American steamer *Afel*, which on the morning of October 24 had the lowest barometer so far reported in connection with this hurricane, 29.18 inches, as the central calm passed over the vessel in 17°44′ N., 80°26′ W. The highest wind experienced there was only a strong gale (Beaufort 9) which came up from the southeast after passage of the calm center. The vortex was evidently deepening again at this time, after being very weak during the preceding day, but it had not attained hurricane force.

Next reports from the immediate vicinity of the storm center came on the morning of the 25th from the Honduran steamers *Contessa* and *Sinaloa*, and from the meteorological station at Cape Gracias a Dios, the latter reporting hurricane winds as the center passed earby on the morning of October 25. The evidence at hand indicates that the storm weakened slowly after passing inland over Honduras, and curved westward along the fifteenth parallel of latitude, dying out in the interior after the 26th.

Much damage to property and banana plantations occurred in northeastern Honduras, with some lesser damage in extreme northeastern Nicaragua, mostly due to floods. About 150 lives were lost here, mainly in Honduras.

This hurricane adds another unprecedented track to the history of West Indian hurricanes. The center moved over a path about 1,400 miles in length, practically encircling the island of Jamaica in the loop along which its normal northeastward movement was reversed into an abnormal southwestward course; and it passed inland over Honduras only about 250 miles from the place, where, a week before, it had its origin.

Charts IX to XII show the synoptic situation at intervals of about 2 days during the course of this disturbance; and the complete track appears on chart XII.

A succession of comprehensive and accurate timely warnings was issued and broadcast from the hurricane forecasting center at Jacksonville to cover the progress of the disturbance from the evening of October 20 until it passed inland over Honduras, 5 days later.

LOWEST BAROMETER READING IN THE FLORIDA KEYS STORM OF SEPTEMBER 2, 1935

By W. F. McDONALD

[Weather Bureau, Washington, November 1935]

The account, in the September issue of this REVIEW, covering the hurricane that swept over the Florida Keys on Labor Day, September 2, 1935, indicated that an effort would be made to secure an accurate determination of the lowest pressure at the center of the storm, the reported value of which was uncertain because of lack of tests of the aneroid barometers from which the readings were obtained.

Through the courtesy of Capt. Iver Olson, the Weather Bureau obtained the privilege of examining and testing his aneroid barometer, which was read in the calm center of the storm. Captain Olson's boat weathered the storm by being fastened on the ways on the north side of the railroad embankment at Craig, Fla., near the north end of Long Key. This barometer was placed in the hands of Ernest Carson, official in charge of the Weather Bureau Office at Miami, Fla., with permission to forward it to Washington for testing in the Instrument Division laboratory.

The observed stand of the indicator hand at the time of lowest pressure as reported by Captain Olson, placed the reading far below the lowest value (28 inches) engraved on the dial. The point of reference was said to be the mark of 10° C. on the thermometer scale that occupies much of the space on the circumference of the dial that would correspond to pressure values of about 27.50 to 25.50 inches.

On receipt of the barometer in Washington it was noted that two points engraved on the Centigrade scale were marked "10", one representing −10° C., the other +10° C. In order to be certain which of these was the observed point of reference, a photograph of the face of the barometer was returned to Miami, with the request that Captain Olson be asked to indicate the proper point of reference. This photograph was returned, with certificates from Captain Olson and R. W. Craig, both of whom verified the +10° mark on the Centigrade scale as the point to which the barometer fell.

Careful laboratory tests of this barometer showed it to be an exceptionally responsive and reliable instrument. The pressure reading by a mercurial manometer, corresponding to the certified position of the barometer needle at the center of the storm on September 2, 1935, was found to be 26.35 inches, which definitely constitutes a new low record for sea-level pressures observed in the Western Hemisphere.

This is, in fact, the second lowest reading in world records, being surpassed only by the observation of 26.185, reported by the Dutch steamship *Sapoeraea* in a typhoon about 460 miles east of Luzon, August 18, 1927. The previous lowest reading for the Western Hemisphere was 27.01 inches, in the Caribbean hurricane of November 5, 1932, reported by the British steamship *Phemius*. Both of these readings were obtained from mercurial barometers. The previous lowest reading for the United States was 27.45 inches, at West Palm Beach, Fla., September 16, 1928, obtained from a barograph record.

The new low-pressure record of 26.35 inches for West Indian hurricanes, set in the Florida Keys on September 2, 1935, probably will stand unbroken for many years to come, inasmuch as it is so greatly below the previous minimum for the American area.